



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

female skulls described by me were not all belonging to very young subjects, and that they present that particular form, not because they were female skulls, but because they belonged to young girls. I at first raised that objection myself, but it was soon refuted by the fact that I met this form in skulls of all ages. The female type prevails through the whole life, or, expressed in other terms, the female type arises therefrom, that the infantile type persists beyond the limits of infancy.

That the knowledge of the cranial contour described in this paper, as conditioned by sex, is not without importance in researches of comparative and historical anthropology, can scarcely be contested. I have already, in another place (*Crania Germaniæ*), expressed a conjecture that probably most of the skulls which induced the Swiss naturalists, His and Rüttimeyer, to establish their *Belair-type*, were female skulls. With reference to other peculiarities of the female skull pointed out by Welcker, I shall not enter upon here, as they have no direct relation to the peculiarity of the cranial contour treated of in this paper.

The anatomical conditions of the female skull to which I wished to draw attention, may be summarised as follows:—

1. The slight elevation of the cranium.
2. The flattening of the vertical region.
3. The perpendicular forehead, the result of the predominance of the cranial roof over the cranial base.
4. The peculiar (No. 6) described form of the cranial contour, a consequence of the peculiarities described in Nos. 2, 3, and 4.

LESLEY'S ORIGIN AND DESTINY OF MAN.*

THIS book, which proceeds from the pen of an American writer, deserves our attention, although the extensive range of subjects it embraces prevents our treating fully of its contents. A difficulty of another kind moreover presents itself. Mr. Lesley's work is entitled "Man's Origin and Destiny," and we naturally expect to find the author's final conclusions embodied in a chapter on Man's *destiny*, as deduced from principles established as to his origin. This chapter,

* *Man's Origin and Destiny*. By T. P. Lesley, Member of the National Academy of the United States. London: N. Trübner and Co., 1868.

however, for the reasons stated in the preface, was never written, and we are left to ascertain these conclusions from expressions scattered throughout the work. We find it stated in the chapter headed "The Four Types of Religious Worship," that "the highest type of the religious idea is Pantheism," in some theory of which "the investigation of God by man's understanding has always resulted." But "the common instincts of man oppose his progress in that direction. He requires a personal God, to whom to fly in joy and sorrow." This worship is, however, according to our author, idolatry. "Youth and women—three quarters of the human race—are idolaters by natural necessity." The contradiction here is only apparent. Idolatry is merely one of the phenomena attending the progress of mankind towards perfection, and if the object of its worship is a false one, no less false is the philosophic idea of God expressed in Pantheism. There is something in God which escapes even the philosophy of Pantheism. The progress of science is, however, to "clear away from men's eyes the errors of the past, and lead them unto that liberty of spirit which is due to Christianity." We thus see that the destiny of mankind is a state of perfection, and also that Christianity has been an essential instrument of progress towards that state. As to individual man, he is "of a supernatural nature, of a spirit which we believe to be immortal, self-conscious, self-studious, inventive and creative, open-eyed, and tongued for speech, responsive to all mysteries, and destined for all glories." We see here faith in the future of both the human race, and of the individual man. But, to Mr. Lesley, orthodox Christianity is only a system of "thunder-and-war-providence worship," whatever that may mean. Christ has certainly come, and He is "the very incarnation of the Deity," but nevertheless he is merely another circle in the spiral of evolution—"the flower of the long development."

These are Mr. Lesley's conclusions as to man's destiny, and we will see how far they are supported by his reasoning. As to his classification of the sciences, we need say little beyond expressing our opinion that a science of autobiography, which Mr. Lesley thinks ought to be included, is neither possible nor desirable. Not possible, because the influences on which man's condition depends, are so subtle in their operation that the laws which govern them cannot receive a scientific formulation. Not desirable, because a biography constituted on strictly scientific principles would be of all books the most uninteresting. Mr. Lesley himself says that "the greatest of fools, Boswell, wrote the most delightful of biographies." While demurring to this hasty estimate of Boswell's character, we would ask Mr. Lesley whether it was not because Boswell was somewhat foolish that his life of Johnson is so readable?

We have next a chapter on "the Genius of the Physical Sciences Ancient and Modern." The difference between them, according to Mr. Lesley, is that in modern science *fancy* is replaced by experiment. This is no uncommon opinion, but, without qualification, it is by no means true. Experiment is enlarged observation, and it cannot be asserted that the ancient philosophers had no observation. On the other hand, experiment without fancy is impossible. Fancy suggests what experiment proves. The utmost that can be said against the ancients is that they did not put their fancy to the most perfect test observation can supply—although even this is by no means certain. Inventions in which we have the application of scientific principles must be tested by experiment. The great fault of the ancients was the insufficiency of their scientific data. This fault, however, was not theirs, but that of the age in which they lived. The Indo-European race, the only one to whom the formation of science appears to be possible, was then still in its infancy, and in this we have the true explanation of the imperfection of ancient science. Mr. Lesley sees in the formation of the nebular hypothesis, of which the genius is evolution, the highest triumph of modern scientific theory. In the hands of Mr. Herbert Spencer it cannot be denied that the doctrine of evolution is of the utmost value, but it must not be concealed that its full truth is far from having received that strict proof which it will require before it is accepted by its opponents. The nebular hypothesis requires a gigantic assumption to begin with. "That space was originally full of homogeneous matter obedient to the laws of physics," and it requires, moreover, "great movements beginning or re-beginning in this unformed, but living, infinite, centres of growing aggregation, and tendencies towards those centres."

One of the chief difficulties of the doctrine of Evolution, is to account for movements, aggregations, and tendencies in homogeneous masses. This difficulty, with others that arise at various stages of its progress, may be overcome, but they seem to point to a source of disturbance not taken into account, and which may require considerable modification in the hypothesis itself.

In the chapter on the "Geological Antiquity of Man," Mr. Lesley gives a very fair *résumé* of the facts from which that antiquity has been deduced. No one, not a mere creature of faith, can doubt that the proof of this antiquity is an accomplished fact. The conclusion that man has existed on the earth for hundreds of thousands of years, is irresistible in the light of modern sciences. We cannot hope to measure the period according to conventional notions of time; we must be content to measure it by geological ages, the exact length of which will possibly ever remain uncertain. If the existence of man

in the middle Tertiary period, inferred from the discovery of bones split longitudinally in Miocene deposits, be established, all estimations of man's antiquity, founded on calculation of the age of the Mississippi deposits, will be left far behind. The ante-glacial epoch of M. Renevier must be extended to embrace probably the whole of the Tertiary period, human remains referable to the earlier portions of which must be sought for in the tropical regions of the southern hemisphere.

Notwithstanding this conclusion as to the antiquity of man, we think Mr. Lesley is rather too severe on those modern clergymen who still adhere to the Mosaic cosmogony. There may be "no alliance possible between Jewish theology and modern science," but if so, no better reason can be found why the orthodox christian should reject the conclusions of modern science, on the very fair ground that orthodox christianity is founded on Jewish theology, to reject which, therefore, is to reject Christianity itself. Not the Christianity of Mr. Lesley, but that which supposes Christ to have come into the world to save mankind from the effects of Adam's sin in Eden. The fall is the central doctrine of Christianity, and it was impossible, if man was at his origin a primitive creature, something between an ape and a man, who emerged into existence upwards of a million of years ago, instead of being a perfect man, created spontaneously only about six thousand years since. How much less possible can the fall be, or rather its universal effects as supposed by Christianity, if there have been not one but many Adams, as required by the doctrine of plurality of man, advocated by Mr. Lesley. We certainly do not apologise for the dogma of the fall, but we think modern clergymen, who refuse to accept scientific doctrines utterly incompatible with it, are, to say the least, entitled to a considerable amount of forbearance in our judgment of their conduct.

In the chapter on "the dignity of man," we have Mr. Lesley's views on the ape origin of man. We quite agree with him that, "No open mind can help imbibing the spirit of the theory of development," and that the law of differentiation laid down by Mr. Herbert Spencer is of the utmost value in explaining how that development has proceeded. Whether, however, the development theory can be enforced without any transcendental reference, as Mr. Lesley asserts, is another question. It may be true that "in geology there must be some explanation for all the phenomena of palæontology," so far as is implied by the further statement that "if there be an apparent advancement and ennoblement of living forms through the ages, it must be dependent in some reasonable manner upon some slow advancing movements in the physics of the globe, with which the living forms must stand in amicable harmony." Man *could* appear on the earth only at

a certain epoch. But *why* should he appear at all? This question cannot yet be said to be satisfactorily answered by the theory of evolution. It does, indeed, assert that at a certain conjuncture in the world's history, man, as the product of the coincidence of certain natural conditions, *must* have appeared. Man is the final product of the operation of nature's laws. This may be so, but the theory of evolution does not furnish any proof that the operation of nature's laws can have this marvellous effect.

Mr. Lesley finds no difficulty in accepting the ape origin of man, but we fear the arguments he furnishes in support of it will not be deemed convincing by those who have hitherto rejected the doctrine. These arguments are chiefly those used by Professor Huxley. A relationship between the man and the ape is certainly established. But *what* relationship? Whatever the presumption may be as to the *descent* of man from the ape, we fear it must be admitted that there is as yet no proof. The ingenious argument of Professor Huxley, derived from the fact that the largest ape brain approaches the smallest human brain much more nearly than the latter does the *largest* human brain, proves nothing. The highest and lowest human brains are connected by others of all intermediate capacities, whereas there is no connecting link between the brain of the Hottentot and that of the Gorilla. Professor Huxley admits, moreover, the importance of the fact, that "there is a very striking difference in absolute mass and weight between the lowest human brain and that of the highest ape." He does not, however, think that the increased size of the brain will at once explain man's superior intellectuality. He, therefore, introduces the influences of an "inconspicuous structural difference" in the organs of speech. This, however, but increases the difficulty of the question, since we have now to account, not only for the larger brain with the accompanying gap between man and ape, but also for the difference in the glottis. Let us add, what is too often lost sight of, that these peculiarities of man's physical structure are accompanied by a *general* increase of muscular and nervous refinement which also requires accounting for. Supposing the brain of the gorilla were much larger than we now find it, and that there were no such "structural difference" as Professor Huxley supposes, would the gorilla *speak*? articulate speech being, according to Professor Huxley, the "grand distinctive character of man." In the absence of a *general* refinement of the ape muscular and nervous organisations, we think not. But mere articulate speech is *not* a distinctive character of man. Without this speech, nevertheless, man would not be man, and his possession of it can be accounted for only on the same grounds as those which explain the origin of his general refinement of physical structure,

both nervous and muscular. When Mr. Lesley says that *language* is no criterion of man's superiority, "for every animal has a language of its own," he misstates the question. No animal but man has naturally articulate speech, and all men *have* this speech. The argument that the difference is only one of degree will not apply here, as articulate speech is not what Mr. Lesley calls "language," although founded on it. The same must be said of the human *smile*, which possesses an element which no animal laugh can claim. Religion, too, although founded on the same principal of love as that shown by the dog for his master, has in its *reverence* something totally unlike the latter emotion. In all these human attributes, which are as much distinctive of man as articulate speech, not the result of imitation itself, we see the operation of one and the same principle of intelligence. It may be that these are all dependent merely on the superior physical structure which also distinguishes man. The existence of this superiority has, however, itself to be accounted for, and we have already pointed out that the theory of evolution is not yet competent to do this, and we doubt even whether the principles laid down by Mr. Herbert Spencer may not be made themselves to support the opposite opinion.

On the important question of the unity or plurality of mankind, Mr. Lesley is a disciple of Carl Vogt. The threefold division of human races agrees well with the existence of three types of manlike ape, each of which, according to Mr. Lesley, has striven "to reach the human ideal, but on different sides of the common development." The objection urged against this view on the ground of the non-existence of intermediate forms between these apes and man, has relation rather to the ape *origin* of man than to his descent from one or several apes. One of the replies to this objection, however, requires notice. It is that the most ancient skulls yet discovered are so degraded "that we may be reasonably excused for suspecting that the early races of mankind were further removed in the order of development from the noblest races now existing, than the apes are removed from them." If, however, this were so universally, whence the necessity for man of more than one ape ancestor? If the influences of external nature are sufficient to cause the evolution of an Indo-European out of a chimpanzee, they would be amply sufficient to develop him out of any form of primitive man. The chief argument in support of the three-fold ape origin of man is the great diversity between the three principal races of mankind. But at the point where they each issue out of the ape ancestor, these races cannot have had nearly so great a diversity. The idea of Mr. Lesley that the races of mankind appeared on the earth successively—"the black and

meagre races first and the white races last"—renders the plurality of man's ape origin still less likely. For if man once existed there could be no necessity in nature to revert to the ape type for the origin of a superior race of men; and that there was no such reversion is rendered almost certain by the existence throughout the earth's surface, at a very remote date, of a low human type similar to the Australian.

Mr. Lesley escapes another difficulty, arising from the existence of an almost endless number of sub-types of man, by ascribing their origin to the crossing between the three chief races. Many anthropologists, however, deny the possibility of effectual crossing between different races, and if the plurality of man's origin be once admitted there is no apparent reason for limiting his ape ancestors to *three*, or even a dozen. This question of change, whether by crossing or otherwise, is a most important one, and appears to be as far from being settled as ever. According to Mr. Lesley, "civilisation is the flower of migration," and we think that the *mixture* which has resulted from migrations must have had a vast effect on the constitution of human races. It may be that peoples have been thus affected without actually losing their racial type, however much it may have been modified. There is undoubtedly, however, another law at work, that of *segregation*, insisted on by Mr. Lesley. Peoples having affinity display a tendency to segregate, and the longer this is continued the greater is the tendency towards a fixity of intellectual phenomena. Should there be a disruption of the ties which bind together such a people, a migration is the result, which usually gives renewed activity to the mental forces of all the peoples who are thus brought into contact. It is clear, however, that in the early ages of man this result of migration can have been very limited, and when all men were equally barbarous, it must have been almost nothing. The principle of *mixture* of peoples, therefore, does not require an original plurality of races. This must be established on other grounds. The facts cited as to the change undergone by Europeans in North America are interesting and valuable if they can be relied on. Mr. Lesley declares that "there is not even a well-marked class of society in the United States" to answer the description of the so called "Yankee" type given by M. Pruner Bey. On the contrary, there are nearly half a dozen *varieties* of man in New England alone, descendants of European varieties.

The doctrine of an original plurality of races, requires that the influence of race should finally predominate over all other influences. One of the strongest objections, however, to this doctrine arises from the difficulty in identifying the descendants of the several primitive stocks. Mr. Lesley has not been very successful in overcoming this difficulty, judging from his classing the Berber with the dark or

African race, as distinguished from the white or Aryan race, to which Mr. Lesley asserts the Semites belong. We have always supposed that the Berber belonged to the Semitic stock, being one of its oldest branches. On the other hand, it is becoming more and more recognised that the Semite is intimately allied to the African family. It is clear that colour alone cannot be accepted as a criterion of race.

In the chapter "On the Early Social Life of Man," Mr. Lesley gives a *résumé* of the facts known as to the social condition of the early inhabitants of Europe. The conclusion Mr. Lesley arrives at, is, that although primitive man was not an idiot, he was merely an animal. The facts, however, do not bear out this conclusion; an animal has not *inventive* genius because he *imitates* the customs of mankind. The dove-tailed door and the plaited cloth of the old lake-dwellers, were the inventions of men who displayed the same faculties of observation and thought as ourselves. No doubt "when the earliest races of mankind appeared, they appeared in the form of fishing and hunting savages, the form most in harmony with the physical condition of the greater part of the earth's surface at that time." But this is the state in which many tribes still exist, and among them all we find the most ingenious contrivances for attaining certain ends required by the limited phase of their civilisation. All savages are, to a certain extent, able to control nature, and make her subservient to their own purposes. This, indeed, is the fundamental ground of superiority of man over the animal world. Without this power man would never make any advance towards civilisation, and for want of it the animal *has* never made any such advance. Whence this power? It may be said that man possesses it *as man*, but this simply carries the difficulty further back and brings us again to the old question of the origin of man.

The remaining chapters of Mr. Lesley's book are chiefly directed towards an explanation of what he terms "arkite symbolism." Mr. Lesley finds that every language of modern times bears the impress of "priest language," which has had its origin in the tradition of a deluge. The remembrance of this deluge was impressed so forcibly on the remnant of mankind as not only thus to affect its languages, but also to give its special form to the primitive alphabet, to originate the peculiarities of ancient architecture, and to form the key to the whole system of Egyptian worship. We have not space to enter into an examination of Mr. Lesley's system of arkism. We would only say that although it is highly ingenious, the etymologies on which it is chiefly founded are far from satisfactory, and if Mr. Lesley had thought of his own dictum, that we do not "get any ethnological light from philology worth speaking of," we think he would have been careful

not to place so much dependence as he has done on philological analogies."

Before closing this article, we would call attention to Mr. Lesley's chapter on the "Four Types of Religious Worship." Although we cannot agree with all Mr. Lesley's conclusions, we recommend the chapter to the careful perusal of those interested in the question discussed. Mr. Lesley finds four great types of religious life "embodied in the worship of the dead, the worship of the powers of nature, the worship of God in Heaven, and the worship of the universe." This division is ingenious, but we are inclined to think, nevertheless, that it does not express the exact truth. According to this view, most savage peoples worship their ancestors, a worship which, with the advance of civilisation, is exchanged for that of the powers of nature, or fetichism. Tried by the example of the Chinese, who to the present day are ancestor-worshippers, this cannot be correct. If we turn to Africa, the very home of fetichism, and take the case of the Kaffirs, one of its finest peoples, we see the same phenomenon; while if we go still lower, to the natives of Australia, we see no actual worship at all, but merely certain mysterious rites for appeasing the supposed anger of spirits. The fact is, that Mr. Lesley does not see the true nature of fetichism. The fetich possesses power only because it is, not merely representative of, but actually the abode or under the influence of a spirit. Immediately the spirit goes the fetich loses its power, and it is thrown on one side. Fetichism is in reality a worship, or rather a propitiation, of spirits. Among the aborigines of Australia this dread of the spirits of departed men is carried to a most amusing extreme. The burial of the dead has undoubtedly had its origin in this dread of departed spirits. The propitiation, or worship of spirits, had, however, at first no relation to particular ancestors; this is an after-developement, and is a natural result of the "differentiation" which marks all intellectual progress. In this way alone can be explained the extraordinary prevalence among the civilised nations of antiquity of the worship of ancestors. Nor do we think the discovery of the so-called "funerary grotto of Aurignac" any disproof of our assertion. The only ground for supposing that the fires lighted in front of the cave were funeral ones, are that no trace of fire has been discovered inside the cave, and no human bones or necklaces found outside; but this is really no proof whatever. Unless the survivors lived *in* the cave with the dead, they could have lighted their fires only on the outside, as it is quite evident, from the indications of tools and weapons being there manufactured, that these survivors passed their time on the spot. The idea of there having been a worship of the dead, is merely a fanciful deduction from facts

which are capable of a more simple explanation. African fetichism is, in reality, the same superstition as the Shamanism, or so-called devil worship of Asia. It is not because man fears the strange and mysterious objects of nature that he worships them ; it is because he suspects some hidden power behind, giving those objects their form and effect. This superstition is, however, not founded only on fear. Fear alone will never explain such a superstition as the reverence for trees, which is one of the most wide-spread. This can only be explained on the principle of utility, combined with a certain prominence of form or position, which renders the object a fit habitation for spiritual influence. The sacred groves of antiquity had a like origin, but the utility for man was there almost lost sight of in the fitness for the spirit. The silent grove of majestic trees exerted the same influence over the worshippers of the Pagan Gods as the cathedral does over the Christian. Mr. Lesley has, moreover, overlooked the fact that every the most abject of fetich worshippers has some idea, however indefinite, of a Supreme Being. Captain Burton states this to be true of most of the African peoples, and it is difficult on the principles Mr. Lesley lays down to account for the fact. It can be explained only by the supposition that there are certain phenomena of nature which appear to the mind too mighty to be caused by the spirits of ordinary men, and they are, therefore, referred to some great and mysterious being, who reveals himself to man only in those phenomena. Kings and great men came to be worshipped as Gods because they were so superior to the common mass of mankind, and in some cases they were identified with the most imposing natural phenomena.

In the Jehovah worship of the Jews we have a still higher development of the worship of ancestors. This is evident from the prevalence of the latter superstition among other Semitic peoples, and from the peculiar phraseology of the Jewish Scriptures. In combination with the worship of ancestors was an indefinite notion of a Supreme Being, such as that possessed by the Kaffirs, which afterwards became developed into that of the *God*, "of their fathers, Abraham, Isaac, and Jacob," the name for whom was adapted from a kindred people. According to this view, we see in the progress from the fear of departed spirits, shown by the savage, to that of Jehovah exhibited by the Jews, a rational evolution of religious worship,—pure fetichism and planetary worship being phases of degradation rather than of evolution. The highest type of religious belief is, as Mr. Lesley points out, Pantheism. Towards this is the tendency of all modern Aryan thought, whether in Europe or America, or among the natives of India. This Pantheism, however, takes its tone from Christianity even in the minds of the enlightened students of Benares, many of

whom are as well read in the controversial literature of Europe as, at least, their English brethren. It is, nevertheless, the morality of the New Testament chiefly which is thus influential, and not its theological dogmas. These partake too much of the superstitions of the old world religions to retain their influence, and Mr. Lesley has done good service in showing that there is a religious evolution which necessarily ends in Pantheism—Christian, while discarding the special dogmas of orthodox Christianity.

We must here leave Mr. Lesley's book. It contains several errors of fact and various misnomers, possibly due to his want of books of reference. Its philological comparisons and deductions, although often ingenious, will not, we think, stand the test of accurate criticism. Again, Mr. Lesley has expressed certain disputed conclusions with too confident an air; while with others, relating more expressly to his peculiar views on Arkite Symbolism, we shall be surprised if many competent readers agree. On the whole, however, we can recommend Mr. Lesley's book as a careful summary of the facts bearing on the theory of evolution, so far as concern the origin and progress of man. It might have been condensed, and its style in some places altered with considerable advantage, but the circumstances under which it was written and published will in a measure account for this not having been done. In the interests of anthropological science we wish it every success.

SPROAT'S STUDIES OF SAVAGE LIFE.*

IN these days of sensational science, it is really refreshing to meet with a book sensibly and modestly written, and dealing, with the tact of a close observer, with facts, to the entire exclusion of grandiose theory. It would have been difficult for Mr. Sproat to have selected an arena for his studies less known, and hitherto more contemptuously regarded.

A short narrative of the circumstances which surrounded the author during the collection of his materials, will best explain why he was able to compress into a small volume so much that is valuable, from its bearing the stamp of truth. Mr. Sproat proceeded to Alberni, the

* *Scenes and Studies of Savage Life*, by Gilbert Malcolm Sproat. London: Smith, Elder and Co., 1868.